STATE PLAN/MASTER FILE WORKSHEET

Identification Number: EE0000490, State: IL, Program Year: 2013

In order to identify and describe, pursuant to 10 CFR 440.14, the **State of Illinois's Illinois Home Weatherization Assistance Program** (IHWAP) for the Illinois Program Year 2014 (Federal Program Year 2013) the Illinois Department of Commerce and Economic Opportunity's Office of Energy Assistance (OEA) has prepared this STATE PLAN. The plan will be offered for public hearing and comment with notice of hearing and copies of the planned publically accessible at least 10 days prior to the hearing and opportunity to comment. The Office of Energy Assistance of the Illinois Department of Commerce and Economic Development will hold a public hearing from 10:30 a.m. to 12:00 p.m. on April 26, 2013, located at the Department of Commerce and Economic Opportunity (DCEO), Office of Energy Assistance, 500 East Monroe, 7th floor Conference room, Springfield, Illinois, and also at the James R. Thompson Center, 100 West Randolph, DCEO, 3rd Floor, Illinois Room, Chicago, IL. These two locations will be linked via video conference.

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V.1 Eligibility

V.1.1 Approach to Determining Client Eligibility

Describe what household Eligibility basis will be used in the Program

In accordance with 10 CFR 440.22:

- 1. DCEO will ensure that weatherization assistance from DOE and HHS funds is provided to a family unit:
 - a. that contains a member who has received cash payment under Title IV or XVI of the Social Security Act or applicable state or local law during the 12 month period preceding the determination of eligibility for weatherization assistance; and.
 - b. That is eligible for assistance under the Low Income Home Energy Assistance Program (LIHEAP) and whose income is at or below the poverty level determined in accordance with criteria established by the U.S. Department of Health and Human Services according to the Low Income Home Energy Assistance Act of 1981, as amended. DCEO will utilize 150% of Poverty as our income guideline standard.

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

V.1.2 Approach to Determining Building Eligibility

Procedures to determine that units weatherized have eligibility documentation

100% of client files will contain eligibility data which is verified by local agency staff. Files are reviewed for proper documentation by state monitoring staff.

Describe Reweatherization compliance

Homes that have been previously weatherized will not be eligible for additional weatherization assistance (except those weatherized prior to September 30, 1994) in accordance with 10 CFR 440.18(e) (2), or those damaged by fire, flood, or Act of God as specified in 10 CFR 440.18 (f) (2) (ii).

Describe how Rental Units/Multifamily Buildings will be addressed

The procedure and policy used for the multi-family building process will depend on the type of building and eligibility that is being utilized. Per DOE provided policy (WPN 10-15) for the simplified eligibility criteria, and published three lists of properties supplied by HUD and USDA. Properties identified on these lists have been determined to meet certain eligibility criteria under IHWAP. These lists have been updated and can be found at:

http://www1.eere.energy.gov/wip/multifamily_guidance.html.

Buildings from the HUD or USDA lists, as well as other HUD buildings (not on the list) where the Building Owner/Landlord has documentation of current occupant income (less than 12 months old) and client demographics may use a Single Application Process. However, in buildings where the tenant pays one or more utility accounts the Local Administering Agencies will obtain from each household a utility release with account number for each utility accounts.

Single Application Process HUD or Other Buildings That Have Client Income and Demographic Data — If centralized client data is obtainable for the building owner/landlord, then a single application may be utilized for the entire building. Even when owners or landlords submit data directly, LAAs will still need to collect and input income and demographic data on individual household units in the building. This information will need to be entered on the WeatherWorks Unit Screens in the Site Manager section.

In the case of HUD buildings appearing on the HUD lists, Local Administering Agencies will require building owner/landlord to provide copies of HUD 50059 forms. Any other needed information will be collected from the building owner/landlord without the need for a separate application process for each client. However, in buildings of five or more units where the tenant pays one or more utility accounts, each household will be required to sign a utility release with account number for all utility accounts.

The LAA will enter and check the income eligibility information for each unit to determine how much may be spent on the building, even when individual tenant applications are not completed.

Standard Application Process: Other Regular or Non-Federally Assisted Multi-Family Buildings - Multi-family buildings where

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the owner/landlord does not have documentation of the current building occupant's current income and demographic information, the LAA will take an IHWAP application taken for each individual unit in the building. Application will include a utility release with account number for all unit utility accounts.

To qualify for weatherization the entire building, at least two-thirds (66%) of the building's units or apartments must be occupied by income-eligible tenants. In cases of two & four unit buildings, the minimum percentage of eligible units must be 50% or more to qualify the building for weatherization

Vacant Units - If the landlord signs a rental agreement to rent to another low-income eligible client within one hundred eighty (180) days, a vacant unit will be counted as an eligible unit, but no longer receives any funding for it. The vacant unit is designated eligible due to income.

Multifamily Spending Limits and Landlord Contribution

Multifamily building weatherization spending limits are the same as single family unit limits times the number of eligible units.

DCEO will ensure that no undue or excessive enhancement occurs to dwelling units as a result of weatherization. DCEO requires a 50% landlord contribution for mechanical (HVAC) completed on the weatherization project.

Rental Procedures

- 1. DCEO will ensure that as a result of weatherization, rental amounts shall not be raised because of the dwelling unit's increased value, and that the benefits of weatherization will accrue primarily to the client and members of the client's family. This will be accomplished through better comfort in the home, a healthier and safer environment, and cost savings. There will be direct energy cost savings where the client pays the utility bills. In cases where the heat is included in the rent, the rent may not increase as quickly due to energy savings of the building.
- 2. The state has developed a Rental Agreement, utilized by all 35 Local Administering Agencies, in which landlords agree not to raise rent for twelve months, agree not to evict tenants without cause for twelve months, and assure that in the event of the sale of the dwelling within twelve months, the terms of this agreement shall be complied with by the new owner. Further, the landlord is advised in the agreement that the tenant will be provided a copy of this agreement by the agency.

Tenants who contact the local agency or the state with complaints of violation of this agreement will be referred to Lincoln Land Legal Assistance Foundation for enforcement assistance under this agreement.

Multifamily building weatherization spending limits are the same as single family units times the number of eligible units.

DCEO will ensure that no undue or excessive enhancement occurs to dwelling units as a result of weatherization. DCEO requires a 50% landlord contribution for mechanical (HVAC) completed on the weatherization project.

Describe the Deferral Process

The decision to defer work in a dwelling or, in extreme cases, provide no Weatherization services, is difficult but necessary in some cases. This does not mean that Weatherization Assistance will never be available, but that work must be deferred or postponed until the problems can be resolved. Local IHWAP Administering Agencies are expected to pursue all reasonable options on behalf of the client and seek outside funding and/or resources if possible.

Deferral conditions may include, but are not limited to:

- The client has known health conditions that prohibit the installation of insulation and other weatherization materials.
- b. The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved in a cost effective manner.

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- c. The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if Weatherization measures were installed.
- d. The house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
- e. Moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs.
- f. Dangerous conditions exist due to high carbon monoxide levels in combustion appliances, and cannot be resolved under existing health and safety measures.
- g. The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house.
- h. The extent and condition of lead-based paint in the house would potentially create further health and safety hazards for the client or Weatherization workers.
- i. Illegal activities are being conducted in the dwelling unit.

In some cases, IHWAP funds may be utilized to correct the situation (red-tagged heating system, high CO readings, minor plumbing repair, minor roof repair, etc.). If the problems that caused the deferral have been properly corrected, the home may be eligible for Weatherization services.

Weatherization clients that feel the Deferral Policy is incorrect or unfair may appeal the decision through the standard Weatherization Appeal process. It may be possible to utilize other funding sources to correct the issue that is causing the program deferral. Some Local Administering Agencies may also have access to other funding options or other federal, state, local, or other resources where the client could be referred for the deferral reasons to other agencies/organizations.

V.1.3 Definition of Children Below age: Six (6) years

V.1.4 Approach to Tribal Organizations

Recommend tribal organization(s) be treated as local applicant? No

If YES, Recommendation: *If* NO, statement that assistance to low-income tribe members and other low-income persons is equal:

No tribal organizations exist within the state. The Department makes no recommendation that a tribal organization be treated as a local applicant.

V.2 Selection of Areas to Be Served

The State of Illinois will continue its IHWAP program for Illinois Program Year 14 delivering weatherization services to all counties of the state through its subgrantee network of 35, Local Administrating Agencies serving all 102 counties, with demonstrated effectiveness in weatherization, program operation and management. Prior to the issuance of any sub grant for WAP or HHS funded weatherization services, evaluations of prior year performance are conducted using the following criteria:

- 1. Program compliance
- 2. Management and administration
- 3. Fiscal compliance
- 4. Technical and quality control

V.3 Priorities for Service Delivery

Income eligible households with high heating bills in relation to income, and those containing elderly members (60 and over), persons with a disability, or young children (5 years or younger) will be given priority and weatherization services first. Non-priority, income-eligible households will be served if funding is available. Therefore, some eligible households may not receive weatherization assistance during the program year for which they applied.

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V.2 Selection of Areas to Be Served

The State of Illinois will continue its IHWAP program for Illinois Program Year 14 delivering weatherization services to all counties of the state through its subgrantee network of 35, Local Administrating Agencies serving all 102 counties, with demonstrated effectiveness in weatherization, program operation and management. Prior to the issuance of any sub grant for WAP or HHS funded weatherization services, evaluations of prior year performance are conducted using the following criteria:

- 1. Program compliance
- 2. Management and administration
- 3. Fiscal compliance
- 4. Technical and quality control

V.4 Climatic Conditions

Climatic information for the state is provided by the U.S. Climatological Survey and energy usage information compiled from state and federal sources. This information indicates that six climatic regions exist within Illinois. The WeatherWorks Energy Audit utilizes *BIN Hours* data and *Cooling Degree Day* data broken out by these six regions.

IHWAP Agencies Annual Heating Degree Day Norm Annual Cooling Degree Day Norm	Climate Zone by WeatherWorks For LAA	Climate Zone Bin Hours See Climate Zone /Bin Hours Chart	Cooling Degree Days (used for seasonal cooling load calculations)
BCMW Community Services, Inc.	E	8,752	1,468
Carver Community Actions Agency	С	8,758	948
Community and Economic Development Association of Cook County	А	8,648	740
CEFS Economic Development Corporation	D	8,756	1,165
Community Action Partnership of Central Illinois	C &D	8,758 &	948 & 1,165
Community Contacts, Inc.	A & B	8,648 & 8,758	740 & 714
Decatur-Macon County Opportunities Corporation	D	8,756	1,165
DuPage County Department of Human Resources	Α	8,648	740
East Central Illinois Community Action Agency	С	8,758	948
Embarras River Basin Agency, Inc.	D	8,756	1,165
Fulton County Health Department	С	8,758	948
Illinois Valley Economic Development Corporation	D&E	8,756 & 8,752	1,165 & 1,468
Kankakee County Community Services, Inc.	С	8,758	948
Kendall-Grundy Community Services	С	8,758	948
Community Action Partnership of Lake County	Α	8,648	740
Madison County Community Development	E	8,752	1,468
McHenry County Housing Authority	Α	8,648	740
MCS Community Services	С	8,758	948
Mid-Central Community Action Agency	С	8,758	948
Northwestern Illinois Community Action Agency	В	8,758	714
Peoria Citizens Committee for Economic Opportunity, Inc.	С	8,758	948
Project NOW, Inc.	С	8,758	948
Rockford Human Services Department	В	8,758	714
St Clair County Community Action Agency	E	8,752	1,468
Sangamon County Department of Community Resources	D	8,756	1,165
Shawnee Development Council, Inc.	F	8,753	1,808
Tri-County Opportunities Council	В	8,758	714
Tazwood Community Services, Inc.	С	8,758	948
Two Rivers Regional Council of Public Officials	D	8,756	1,165

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Champaign County Regional Planning Commission	D	8,756	1,165
Crosswalk Community Action	E & F	8,752 & 8,753	1,808 & 1,468
Wabash Area Development, Inc.	E & F	8,752 & 8,753	1,468 & 1,808
Western Egyptian Economic Opportunity Council	E & F	8,752 & 8,753	1,468 & 1,808
Western Illinois Regional Council	С	8,758	948
Will County Center for Community Concerns	А	8,648	740

	•		•	ulations by Weatl ırs at a particular	•	ange.
Climate Zone:	Α	В	С	D	E	F
	Chicago	Rockford	Peoria	Springfield	St. Louis	Evansville
From -40 to -34	0	0	0	0	0	0
From -35 to -31	0	0	0	0	0	0
From -30 to -24	0	1	0	0	0	0
From -25 to -21	0	0	0	0	0	0
From -20 to -14	2	6	2	0	0	0
From -15 to -11	11	13	12	2	0	1
From -10 to -4	27	49	31	11	1	3
From -5 to -1	53	81	50	24	11	5
From 0 to 4	89	126	89	52	24	16
From 5 to 9	115	179	130	92	50	37
From 10 to 14	164	247	180	131	97	69
From 15 to 19	231	314	250	183	138	114
From 20 to 24	371	458	379	286	228	205
From 25 to 29	589	663	560	511	404	382
From 30 to 34	869	827	764	747	637	639
From 35 to 39	725	631	674	668	670	663
From 40 to 44	572	510	524	574	617	639
From 45 to 49	565	523	505	541	545	608
From 50 to 54	581	548	533	538	576	615
From 55 to 59	604	639	582	582	586	624
From 60 to 64	700	726	703	678	676	704
From 65 to 69	759	689	740	754	764	747
From 70 to 74	581	605	739	812	850	867
From 75 to 79	487	451	571	656	731	704
From 80 to 84	324	287	405	488	578	539
From 85 to 89	165	137	231	277	346	367
From 90 to 94	58	42	89	125	165	163
From 95 to 99	6	6	15	22	47	38
From 100 to 104	0	0	0	2	11	4
Total	8,648	8,758	8,758	8,756	8,752	8,753

Cooling Degree Days (used for seasonal cooling load calculations)					
Α	A B C D E F				
Chicago	Rockford	Peoria	Springfield	St. Louis	Evansville
740	714	948	1,165	1,468	1,808

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V.5 Type of Weatherization Work to Be Done

Complete weatherization work shall include the following:

- 1. Air sealing/infiltration reduction
- 2. Insulation of attic
- 3. Insulation of walls
- 4. Insulation of floors above unheated crawl spaces
- 5. Control of wasted heat
- 6. Mechanical adjustment including cleaning and tune-up
- 7. Furnace repairs
- Furnace retrofits
- 9. Furnace replacements (when necessary)
- 10. Air Conditioning Replacement (when necessary)
- 11. Baseload measures such as compact fluorescent lights, and replacement refrigerators (no freezers will be installed, and ice makers are not allowed)*.
- 12. Replacement of inefficient Windows and Doors
- 13. Related Health and Safety work
- 14. Incidental Repairs
- * Refrigeration appliances that are replaced must be disposed of according to the environmental standards in the Clean Air Act (1990), Section 608, as amended by the Final Rule, 40 CFR 82, May 14, 1993. The party recovering the refrigerant must possess an EPA-approved Section 608 Type II license or an approved universal certification.

All work is performed in accordance to the DOE - approved energy audit procedures and 10 CFR 440 Appendixs . and will follow the Weather Works energy audit approved by DOE.

Illinois has implemented a computerized approach to Project Retro-Tech which was approved by DOE. This system can automatically perform the calculations leading to Project Retro-Tech's Cost/Benefit Ratio. Because of the data storage capacity of the state of Illinois' computer, each subgrantee's information on material costs, expected life, and R-values can be stored, as well as the labor hours/costs for the installation of a specified quantity of material. The program itself contains data on potential heat savings and fuel cost per heating unit.

Operationally, the subgrantee enters data on a particular source of heat loss, e.g., type of window, dimensions, type of wall surrounding, present condition of source of heat loss, and quantity of material required. Then the computer generates the benefit cost ratio and prints a work order which lists:

The weatherization measures to be installed in order of cost effectiveness

Estimated material costs

Estimated labor costs

Every completed unit will receive a final inspection to ensure that the weatherization work was completed properly. In addition DCEO will conduct random checks on subgrantee assessments and final inspections.

V.5.1 Technical Guides and Materials

Technical requirements for IHWAP weatherization work are contained in the IHWAP Weatherization Field Standards Manual as revised for Program Year 2013.

V.5.2 Energy Audit Procedures

Illinois uses a state developed energy audit program known as WeatherWorks. WeatherWorks also serves as the information management system for its IHWAP. Originally the state established a mainframe version of the state's energy audit tool known as WHEA. In 2003, Illinois developed a new windows version WeatherWorks, and on 2/18/03 submitted to DOE for approval to audit single family, multi-family and mobile home dwellings energy audit.

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WeatherWorks was approved for buildings up to four units and mobile homes through December, 2013.

IHWAP will work with Paul Knight, of Domus Plus and DOE to submit WeatherWorks for reapproval for single family buildings, residential buildings up to four units and mobile homes.

In IHWAP Program Years 2012 DOE identified technical problems with WeatherWorks capacity to complete reliable audits of multifamily residential buildings of five units or more. After exploring the technical and resource requirements necessary to give WeatherWorks that capacity, DCEO agreed with DOE's request to use DOE approved energy audit software to audit multifamily weatherization projects using it to generate Savings to Investment Ratios (SIR) to justify multifamily retro fit weatherization measures before initiation of multifamily weatherization projects. The state has obtain copies of TREAT, organized an in state training that included state technical staff, a staff member of Illinois Climate Research and Training Center (ICRT) of the University of Illinois Sustainable Technology Center (UISTC),, and representatives of three Local Administering Agencies. In Program Year 2013, TREAT was used to energy model multifamily projects and projects with SIR justified measures were submitted to DOE for review and approval. WeatherWorks is still used for case management of multifamily weatherization work. In Program Year 2014, DCEO will submit it procedures to DOE for approval of independent use of TREAT to perform energy audits of multifamily projects.

Audit Procedures and Dates Most Recently Approved by DOE

On December16, 2008, the U.S. Department of Energy last approved WeatherWorks for single family homes and mobile home units through December 2013. IHWAP will be submitting WeatherWorks to DOE for reapproval in the Fall of 2013.

V.5.3 Final Inspection

Every completed unit will receive a final inspection by the Local Administering Agency's IHWAP certified final inspector. This inspection will ensure that the weatherization work was completed properly, that all measures called for in assessment and work orders have been installed, completed in a workman like manner and in accordance with the priorities determined by the audit procedures.

V.6 Weatherization Analysis of Effectiveness

DCEO is continuing a comprehensive program evaluation to determine average energy savings and program effectiveness. Local agencies are monitored for their production status on a monthly basis utilizing a computerized Weatherization tracking system. Status of evaluation project in Illinois - DCEO has contracted with the University of Illinois to provide a series of energy evaluation impact studies and to develop a methodology that will be used to conduct periodic impact energy evaluations of the IHWAP. Currently, electronic client data from DCEO databases is being reviewed and will be used to request billing data from utility vendors for energy use and savings. The first energy impact evaluation report was completed in June, 2006 and the second in August, 2011. The Indoor Climate Research and Training program (ICRT) of the University of Illinois Sustainable Technology Center is expected to have the next evaluation complete in the fall of 2013. This will be an ongoing evaluation process.

V.7 Health and Safety

Illinois Home Weatherization Assistance Program

Health and Safety Plan for Federal Fiscal Year 2013

Illinois has developed a Health and Safety Plan using WAP funds to identify and abate specific health and safety hazards that may exist in dwellings weatherized by Local Administering Agencies. The allowable Health and Safety average will be \$1,000 per unit. The maximum cost for Health and Safety work on a unit is \$1,500. This average was established in light of the ASHRAE 62.2 implementation. Health and Safety funds will be budgeted in a separate line item.

Health and Safety Expenditure Limits

Recognizing that potential Health and Safety Costs could absorb and exceed WAP resources for any one home weatherization project, DCEO has established a Health and Safety Budget which may average \$1,000 per unit weatherized by an LAA but may not exceed \$1,500 in any one unit.

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Health and Safety cost are allowed cumulatively. Costs which may be paid under Health and Safety include:

- 1. Installation of Smoke Detectors and Carbon Monoxide detectors:
- Installation/Repair of exhaust fans in kitchens and bathrooms in accordance with ASHRAE 62.2 protocol;
- Lead Safe Weatherization work;
- 4. Correcting/Repairing leaking fuel supply lines;
- 5. Correcting/Repairing improper or ineffective HVAC venting (such as installing a chimney liner);
- 6. Repairing/Replacing Air Conditioning units in homes where at-risk, medically certified/necessitated occupants dwell:
- 7. Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions:
- 8. Minor electrical repairs/upgrades necessary for weatherization measures and where the health and safety of the occupant is at risk;
- Minor correction of moisture and mold creating conditions when necessary to ensure the longterm stability and durability of the weatherization measures and the clients long-term health and safety;
- Gutter or downspout work when necessary to keep rain water out of the dwelling to stop or prevent moisture/mold mildew conditions per DOE Standard Work Specifications;
- 11. Sump Pump repair or replacement necessary to keep seepage water out of the dwelling to stop or prevent moisture/mold mildew conditions in accordance with the DOE Standard Work Specifications: and,
- 12. Other Health and Safety-related costs (such as water heater repair)

Deferral Policy

The decision to defer work in a dwelling or, in extreme cases, provide no Weatherization services, is difficult but necessary in some cases. This does not mean that Weatherization Assistance will never be available, but that work must be deferred or postponed until the problems can be resolved. Local IHWAP Administering Agencies will pursue all reasonable options on behalf of the client and seek outside funding and/or resources if possible.

Deferral conditions may include, but are not limited to:

- The client has known health conditions that prohibit the installation of insulation and other weatherization materials.
- b. The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved in a cost effective manner.
- c. The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if Weatherization measures were installed.
- d. The house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
- e. Moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs.
- f. Dangerous conditions exist due to high carbon monoxide levels in combustion appliances, and cannot be resolved under existing health and safety measures.
- g. The client is uncooperative, abusive, or threatening to the crew, subcontractors, auditors,

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inspectors, or others who must work on or visit the house.

- The extent and condition of lead-based paint in the house would potentially create further health and safety hazards for the client or Weatherization workers.
- i. Illegal activities are being conducted in the dwelling unit.

In some cases, IHWAP funds may be utilized to correct the situation (red-tagged heating system, high CO readings, minor plumbing repair, minor roof repair, etc.). If the problems that caused the deferral have been properly corrected, the home may be eligible for Weatherization services.

Weatherization clients that feel the Deferral Policy is incorrect or unfair may appeal the decision through the standard Weatherization Appeal process. It may be possible to utilize other funding sources to correct the issue that is causing the program deferral. Some Local Administering Agencies may also have access to other funding options or other federal, state, local, or other resources where the client could be referred for the deferral reasons to other agencies/organizations.

Health and Safety Investigation during Weatherization Assessment and Health and Safety Notice and Client Education

At time of application all Weatherization applicants are interviewed about potential health and safety hazards in their home and the results of this health and safety interview are recorded on a form.

Most importantly, at the time of the initial energy audit, the auditor also asks the client about problems in the home, possible sickness from Carbon Monoxide poisoning, smell of flue gasses, mold problems, etc. As part of the energy audit the auditor will make important health and safety observations. The WAP client will also receive Consumer Education on all applicable issues in the latest DOE Health and Safety Guidance.

All precautions are taken to ensure that clients are protected from any potential Health and Safety risks. Local WAP agencies have been trained in identifying any health and safety hazardous conditions in the home and the use of a Hazardous Condition Reporting form. All homes receive combustion appliance testing with flue gas analyzers, CO and gas leakage detection equipment and undergo a complete health and safety inspection. All homes are reviewed to ensure proper operation of smoke detectors, and of CO detectors. In addition, we provide copies of the EPA pamphlets "Renovate Right" and "Mold and Moisture" to the owners and occupants at the time of energy audit.

Documentation of receipt is retained in the customer file.

During the assessment, the IHWAP assessor may discover a variety of hazardous health and/or safety conditions. These hazardous conditions are classified as either "immediate" or "potential" depending on their severity. They are defined as follows:

Immediate Hazard Conditions - Conditions that reasonably constitute an immediate risk of harm to person or property. For example: gas leaks, severe structural problems, electrical safety problems, severe mold problems, immediate fire hazards, etc.

Potentially Hazardous Conditions - Conditions that reasonably represent a potential risk of harm to person or property. For example: items stored in the attic or basement impeding access, leaking water or sewage lines, minor structural problems, etc.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord. This form includes the client's name, address, assessment date, job number, description of a hazardous condition, time and date, and client and assessor signatures. If an Immediate Hazard is discovered, no Weatherization work (architectural or mechanical) is to be done on the home until the immediate hazard has been corrected. If the immediate hazard cannot be corrected, the home is deferred from Weatherization work until such time that the appropriate hazardous conditions have been remedied or repaired.

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Incidental Repair Limit

In addition to the Health and Safety Limit, DCEO will implement an Incidental Repair Limit of \$700. An Incidental Repair is a weatherization measure that is necessary for the effective performance or preservation of weatherization materials. Incidental Repair measures are separate and distinct from Energy Saving Retrofit measures or Health and Safety measures.

Some examples of Incidental Repair measures are:

- 1. Repair or replacement of heating system ductwork; HVAC clean and tune;
- 2. Minor roof repair necessary for the effective performance of weatherization measures;
- Exterior or interior wall repair, necessary to install insulation; Ceiling repair, necessary to install insulation;
- 4. Repair of windows and doors, not related to air sealing.
- 5. Replacement window or door measures, where the measure does not generate a Savings to Investment Ratio (SIR) of "1" or greater, and where the unit is damaged beyond repair or missing;
- 6. Installing attic ventilation (without insulation);
- 7. The need for any Incidental Repairs will be justified and documented in the Client File. The cost of these repairs will be included in the Whole House SIR Calculation.

Health and Safety Plan for Specific Hazards

The IHWAP Health and Safety Plan encompass the following policy, practice and procedure for specific health and safety threats:

Air Conditioning and Heating Systems

✓ Concur with WPN 11-6

<u>Funding:</u> General repair and replacement of heating and cooling equipment will not be conducted with Health and Safety funding. Repair or replacement of Air Conditioners as a medically-necessitated Health and Safety measure are only allowed with HHS or State funding. Correcting/Repairing improper or ineffective Water Heater is an allowable health and safety cost. Water heaters may be repaired under the overall Health and Safety category. If the flue liner is NOT being installed because of the Retrofit, then it is an allowable health and safety cost.

<u>Beyond DOE WAP Scope</u>: Replacement of nonexistent heating systems, repair or replacement of air conditioning systems with DOE funds is not allowed. Gas lines, sediment traps, flexible connectors, temperature/pressure discharge pipes, temperature/pressure valves, or gas shut off valves are not allowed to be replaced unless they are damaged or leaking.

<u>Standards For Remedy</u>: Air conditioning system replacement, repair, or installation is allowed in homes of at-risk occupants where climate conditions warrant with State or HHS funding.

In Multifamily projects no architectural work is to be done on any unit where the heating system has been determined to be unsafe.

Standards For Referral: Where alternative help with this health and safety hazards exists, client are referred. LIHEAP Emergency Heating program is considered where the client is eligible.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of IHWAP policy and procedure air conditioning and heating system repair or replacement. The TCP curriculum includes the protocols and procedures for gas leak and combustion testing.

IHWAP's five day contractor certification for HVAC contractors and Mobile Furnace lab training will include combustion safety training and awareness of relevant guidance.

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<u>Client Education</u>: Where new units are installed Final inspector will ensure that the occupants have copies of appliance manuals. Where appropriate the LAA will discuss and provide information on appropriate use, maintenance, and disposal of appliances / water heaters. If bulk fuel tanks are not removed, LAA staff will discuss their proper disposal with occupants.

Air Conditions Installation: Assessor will make sure systems are present, operable and performing. Assessor will also determine the presence of at-risk occupants. In most cases, this would only be limited to the repair of a central AC system or the installation of a window air conditioner but it can include replace of central air condition systems.

An at-risk client must have a medical professional complete and sign the Medical Condition Medical Condition Verification Form. This form is found in the Intake Attachments of the IHWAP Operations manual at Page IV.26.

Because the air conditioner work is a Health and Safety measure, a positive SIR would not be required and the measure would not have to be calculated as a Retrofit. The costs of this measure would have to include the labor to repair/install the air conditioning.

Heating System Installation: Assessor will make sure systems are present, operable and performing. Repair or Replacement is cost justified using a Savings to Investment Ratio (SIR) as an energy-saving retrofit measure.

Appliances and Water Heaters

✓ Concur with WPN 11-6

<u>Funding:</u> Correcting/Repairing improper or ineffective Water Heater is an allowable health and safety cost. If the flue liner supports the Retrofit measure for a new heating system, then the cost is included in the cost of the Retrofit. If the flue liner is NOT being installed because of the Retrofit, then it is an allowable health and safety cost.

<u>Beyond DOE WAP Scope</u>: Replacement of an appliance other than water heaters is not an allowable health and safety cost. See also air conditioning and heating systems above. The Water Heater Repair costs does NOT include the installation of a chimney liner (or Class B flue), if needed.

Gas lines, sediment traps, flexible connectors, temperature/pressure discharge pipes, temperature/pressure valves, or gas shut off valves are not allowed to be replaced unless they are damaged or leaking.

<u>Standards For Remedy</u>: Combustion appliances are visually inspected as part of the assessment process to determine if they are performing safely. In addition, at assessment and at the end of each work day and at final inspection, combustion testing is performed on each combustion appliance. Copy of test results is placed in the job file and be subject to OEA's monitoring protocol.

Water heaters may be repaired under the overall Health and Safety category. The repair work may include the gas valve, venting, burner adjustment, burner door replacement, minor repairs, etc.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes conducting diagnostic testing on appliances as well as combustion safety training.

IHWAP's five day contractor certification for HVAC contractors' curriculum includes combustion safety training and awareness of relevant guidance.

<u>Client Education</u>: Where assessment detects evidence of this health and safety hazard, LAAs at assessment or at final inspection counsel the client and provide information on appropriate use, maintenance, and disposal of appliances / water heaters.

Asbestos - in siding, walls, ceilings etc.

✓ Concur with WPN 11-6

<u>Funding:</u> Removal of siding is allowed to perform energy conservation measures.

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<u>Beyond DOE WAP Scope</u>: Abatement and replacement of asbestos containing building components is not allowed with any IHWAP funding.

<u>Standards For Remedy</u>: Assessors and installers will inspect the exterior wall surfaces and substrate for asbestos siding prior to drilling or cutting.

Removal of siding is done to perform energy conservation measures. All precautions must be taken not to damage siding. Asbestos siding should never be cut or drilled. Recommended, where possible, to insulate through home interior.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes Asbestos identification and management.

IHWAP's five day contractor certification curriculum includes Asbestos hazard training. All LAA weatherization staff, weatherization contractors' workers must complete either OHSA 15 or OSHA 30 hour training which includes training on Asbestos hazards and the workplace.

<u>Client Education</u>: When suspected asbestos siding is present client / owner is informed and informed on how to take precautions.

Asbestos - Vermiculite

✓ Concur with WPN 11-6

Funding: Asbestos prescriptive sampling is allowed by a certified tester

Beyond DOE WAP Scope: Removal of asbestos containing is not allowed.

<u>Standards For Remedy</u>: At assessment vermiculite is visually identified. Testing is allowed by certified AHERA tester. Where vermiculite is present, unless testing has determined otherwise, it is assumed to contain asbestos and precautionary measures are taken. Removal as an IHWAP measure is not allowed but encapsulation by certified professionals is. Blower door testing is deferred or performed pressurized instead of depressurized.

Standards For Deferral: If complete removal is necessary to install and / or preserve weatherization measures, then the project is deferred.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes identification and management.

IHWAP's five day contractor certification curriculum and OSHA worker safety trainings will include how to identify and manage asbestos containing material.

<u>Client Education</u>: Where assessment detects evidence of this health and safety hazard, LAAs at assessment or at final inspection will counsel the client not to disturb suspected asbestos containing material and will provide the client with a copy of asbestos safety information. If asbestos testing has been done, the client is provided a copy of the results and will sign a form stating the results were received.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Asbestos - on pipes, furnaces, other small covered surfaces

✓ Concur with WPN 11-6

<u>Funding</u>: Encapsulation is allowed by an AHERA asbestos control professional. Removal may be allowed on a case by case basis.

Beyond DOE WAP Scope:

Standards For Remedy: Asbestos is assumed present in covering materials. Testing is allowed by a

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certified tester.

Standards For Deferral: *

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes Asbestos identification and management.

IHWAP's five day contractor certification curriculum includes Asbestos hazard training. All LAA weatherization staff, weatherization contractors' workers must complete either OHSA 15 or OSHA 30 hour training which includes training on Asbestos hazards and the workplace.

<u>Client Education</u>: Where covering materials suspected of containing asbestos are present, the assessor and /or final inspector will instruct clients not to disturb it. If testing is done clients will receive a copy of the results and will sign a form attesting to the receipt.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Disposal Procedures: *

Biologicals and Unsanitary Conditions- odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.

✓ Concur with WPN 11-6

<u>Funding:</u> Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed. Limited water damage repairs that can be addressed by weatherization workers and correction of moisture and mold creating conditions are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures

<u>Beyond DOE WAP Scope</u>: Addressing bacteria and viruses is not an allowable cost. Where severe Mold and Moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs the building is deferred

<u>Standards For Remedy</u>: Sensory and visual inspection for these health and safety issues is part of the assessment protocol. Moisture meters are carried by assessors and used to diagnosis moisture problems. Mold testing is not an IHWAP allowable cost.

Standards For Deferral: Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes how to recognize conditions and when to defer as well as worker safety when coming in contact with these conditions.

IHWAP's five day contractor certification curriculum includes how to recognize conditions and when to defer as well as worker safety when coming in contact with these conditions.

<u>Client Education</u>: Were these problems are identified clients receive information on the issues and where appropriate information on how to maintain a sanitary home or moisture awareness information. Where a home is deferred for these issues the LAA will inform the client of what steps to take to correct the deferral conditions.

All clients will receive the EPA Lead Booklet (Renovate Right), Moisture/Mold Booklet, and the Client Satisfaction Questionnaire are required to be given to every IHWAP Client at the time of the Assessment/Energy Audit. The Client must sign a form stating they have received the booklet at the time of Assessment. They can either sign the form in the back of the book or the form in Exhibit VIII.12. If LAAs do not have sufficient copies on hand, they will copy the camera-ready copies of these booklets from the EPA's internet site, and print them locally.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an

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individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

<u>Training</u>: Training on these health and safety issues is included in the Weatherization Training and Certification Program training, incorporated in IHWAP Field Standards and Operations Manual and reinforced in OEA field contact with LAA personnel. The IHWAP's Health and Safety on Indoor Pollutants course will include introduction to mold, moisture and biological hazards as well as basic mitigation strategies.

Building Structure and Roofing

✓ Concur with WPN 11-6

<u>Funding</u>: Correction of preexisting code compliance issues is allowable cost only where weatherization measures are conducted.

<u>Beyond DOE WAP Scope</u>: Structural and roof repair are not allowable costs of the IHWAP. Correction of preexisting code compliance issues is not an allowable cost other than where weatherization measures are conducted.

<u>Standards For Remedy</u>: Visual inspection for roofing and structural issues is part of the assessment protocol. Evaluation of roofing and structural issues includes ensuring that access necessary for weatherization work is safe for entry and performance of assessment, work and inspection.

Standards for Deferral: Where the house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities the home is deferred.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes how to identify structural and roofing issues.

IHWAP's five day contractor certification curriculum includes general code compliance.

<u>Client Education</u>: Clients are notified of structurally compromised areas and, where the building is deferred for roofing or structural issues, of the necessary steps to correct.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

<u>Procedure and Protocol</u>: If more than incidental repair is required the building is deferred. Roofing repair to ensure the long term stability and durability of weatherization measures may be allowed under the health and safety budget.

<u>Training:</u> Training on how to identify structural issues is included in the Weatherization Training and Certification Program training, incorporated in IHWAP Field Standards and Operations Manual and reinforced in OEA field contact with LAA personnel.

Code Compliance

✓ Concur with WPN 11-6

Funding: Correction of preexisting code compliance issues is allowable only where weatherization measures are being conducted.

<u>Beyond DOE WAP Scope</u>: Correction of preexisting code compliance issues is not allowable except where weatherization measures are being conducted.

<u>Standards For Remedy</u>: Weatherization work will comply with applicable codes in the jurisdiction where the work is being done. Visual inspection at assessment and local code enforcement inspections are used to establish code compliance issues.

Standards For Deferral: Condemned properties and those with "red tagged" health and safety conditions are deferred.

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<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes relevant code compliance how to determine what code compliance may be required.

IHWAP's five day contractor certification curriculum includes overview of code compliance issues.

Client Education: Clients are informed of code compliance issues.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Combustion Gases

✓ Concur with WPN 11-6

<u>Funding:</u> Proper venting of combustion appliances is an IHWAP requirement. Correction of venting is allowed when testing indicates a problem.

Beyond DOE WAP Scope: *

<u>Standards For Remedy</u>: Combustion safety testing is required when combustion appliances are present. The assessor shall inspect venting of combustion appliances and confirm adequate clearances. Naturally drafting appliances are tested for draft and spillage under worst case conditions before and after air tightening. Cooking burners are inspected for operability and flame quality. The following inspection procedures and maintenance practices are required for all Natural Draft & Power

Cooking burners are inspected for operability and flame quality in the assessment process.

<u>Training:</u> How to perform appropriate testing, determine when a building is excessively depressurized, and the difference between air free and as-measure is part of the IHWAP TCP curriculum. In addition, combustion safety field training is offered or required whenever monitoring indicates that it is not being done correctly.

IHWAP's five day contractor certification curriculum includes awareness of combustion safety issues and how to perform combustion safety testing.

<u>Client Education</u>: As part of the weatherization process, clients are provided a combustion safety and hazards informational flyer. This will include the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Combustion Gas Problem Discovery On all Natural Draft & Power Vented Appliances the following procedures are followed:

The following inspection procedures and maintenance practices are performed on all gas-fired furnaces, boilers, water heaters and space heaters. The IHWAP Weatherization Field Standards Manual provides the acceptable combustion test analysis values.

- 1. Inspect the burners for dust, debris, misalignment and other flame-interference problems. Look for soot, burned wires, and other evidence of flame roll-out. Clean, vacuum and adjust burners.
- 2. Clean and adjust thermostat and check anticipator setting.
- 3. Determine that pilot is burning (if equipped) and that main burner ignition is satisfactory.
- Test pilot-safety control for complete gas valve shutoff when pilot is extinguished.
- Install new thermocouple (if an intermittent ignition device, or IID, is being installed).
- 6. Adjust pilot flame so that the hot tip of the thermocouple is enveloped by the flame.
- 7. Test for CO with flue gas analyzer in undiluted flue gases before they enter the draft hood. A

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CO reading of 100 ppm is considered the maximum acceptable level. A reading in excess of 100 ppm indicates that the furnace needs to be adjusted or repaired.

- 8. Observe flame characteristics if soot, CO, or other combustion problems are evident.
- 9. Remove causes of CO and soot, such as closed or blocked primary air intake, over-firing and flam impingement.
- 10. Check venting system for proper size and pitch.
- 11. Check venting system for obstructions, blockages or condensation.
- 12. Set up and operate house under worst-case depressurization identified in the IHWAP Weatherization Field Standards Manual, "House Depressurization Limits", when measuring appliance draft, measure chimney draft above the draft diverter. Minimum draft pressures shown in IHWAP Weatherization Field Standards Manual must be reached within two minutes of appliance operation for each natural draft combustion appliance. Draft does not have to be measured for power-vented appliances.
- 13. Take action to improve draft, if inadequate because of improper venting, leaky venting, obstructed chimney or lack of combustion/dilution air.
- 14. Seal leaks in vent connectors and chimneys with high temperature sealant.
- 15. Determine steady-state efficiency (SSE) using flue gas analyzer measuring in undiluted flue gases below the draft diverter.
- 16. Check high limit control for proper operation.
- 17. Measure O2 level and stack temperature in undiluted gases (before they enter the draft hood). O2 level should be between 4% and 9%. Net stack temperature should be between 300oF and 600oF.
- 18. Measure gas input
- 19. Adjust gas input if burners are over-fired or under-fired. Adjust input by adjusting gas pressure to between 3.4" and 4.3" water column (w.c.) for natural gas and 10 " w.c. to 11" w.c. for propane, or replace the burner orifices.
- 20. Testing of naturally drafting appliances for draft and spillage under worst case conditions will occur before and after air tightening.

The following inspection procedures and maintenance practices are required for all direct vent sealed combustion furnaces.

- 1. Inspect the burners for dust, debris, misalignment and other flame-interference problems. Look for soot, burned wires, and other evidence of flame roll-out.
- 2. Clean, vacuum and adjust when needed.
- 3. Inspect the secondary heat exchanger and clean as needed. Inspect and clean combustion blower wheel and motor as needed. Clean and adjust thermostat and check anticipator setting.
- Test for CO with flue gas analyzer in undiluted flue gases before they enter the draft hood. A CO reading of
- 5. 100 ppm is considered the maximum acceptable level. A reading in excess of 100 ppm indicates that the furnace needs to be adjusted or repaired.
- 6. Observe flame characteristics if soot, CO, or other combustion problems are evident.
- 7. Remove causes of CO and soot, such as closed primary air intake, over-firing, and flame impingement. Check venting system for proper size and pitch.
- 8. Determine steady-state efficiency (SSE) using flue gas analyzer measuring in undiluted flue

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gases below the draft diverter.

- 9. Check high limit control for proper operation.
- 10. Measure O2 level and stack temperature in undiluted gases (before they enter the draft hood). Adjust as necessary to meet Product Manufacturer's Instructions.
- 11. Measure gas input
- 12. Adjust gas input if burners are over-fired or under-fired. Adjust input by adjusting gas pressure to between 3.4" and 4.3" water column (w.c.) for natural gas and 10" w.c. to 11" w.c. for propane, or replace incorrect or damaged burner orifices.

Cooking burners are inspected for operability and flame quality in the assessment process.

<u>Client Education</u>: Clients are provided a combustion safety and hazards informational flyer as part of the weatherization process.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Drainage - gutters, down spouts, extensions, flashing, sump pumps, landscape, etc.

✓ Concur with WPN 11-6

<u>Funding</u>: Correction of moisture and mold conditions are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures installed

<u>Beyond DOE WAP Scope</u>: Addressing drainage issues is beyond the scope of IHWAP weatherization work except in limited instances where correction of moisture and mold conditions are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures installed.

<u>Standards For Remedy</u>: Visual inspection of downspout and gutter systems as well as general site drainage shall be part of the assessment protocol

Standards For Deferral: Homes with serious health concerns that may create a serious health concern that requires more than incidental repair is deferred.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of drainage issues and inspection procedures for them.

IHWAP's five day architectural contractor certification curriculum includes awareness of drainage issues.

<u>Client Education</u>: Where assessment detects evidence of this health and safety hazard, LAAs at assessment or at final inspection will counsel the client All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Electrical Other than Knob- and Tube Wiring

✓ Concur with WPN 11-6

<u>Funding:</u> Minor electrical repairs are allowed where health and safety of occupants is at risk. Upgrades and repairs will also be allowed when necessary to perform specific weatherization measures.

Beyond DOE WAP Scope: Replacement of electrical systems is not allowed with any IHWAP grant.

<u>Standards For Remedy</u>: The Assessor will inspect for electrical safety issues at assessment.

Standards For Deferral: To the extent electrical conditions prevent proper weatherization and may not be addressed with WAP funds, the home is deferred and the client is referred to the State IHWAP or other resources on a case-by-case basis.

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<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. The TCP curriculum includes: How to identify electrical hazards and their remedy.

IHWAP's training curriculum will offer a continuing education class in basic electricity and electrical issues

<u>Client Education</u>: Clients are provided the Electrical Safety Workbook which includes information on over-current protection, overloading circuits, and basic electrical safety/risks.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord

Electrical Knob- and Tube Wiring

✓ Concur with WPN 11-6

<u>Funding:</u> Minor repairs, including minor upgrades of knob and tube wiring systems, are allowed where health and safety of occupants is at risk. Upgrades and repairs will also be allowed when necessary to perform specific weatherization measures.

Beyond DOE WAP Scope: Replacement of electrical systems is not allowed with any IHWAP grant.

<u>Standards For Remedy</u>: The Assessor will inspect for electrical safety issue at assessment. Wall cavities that contain active knob-and-tube wiring will not be insulated

Standards For Deferral: To the extent electrical conditions prevent proper weatherization and may not be addressed with WAP funds, electrical repairs are referred to the State IHWAP or other resources on a case-by-case basis.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. How to identify electrical hazards

IHWAP's training curriculum will offer a continuing education class in basic electricity and electrical issues

<u>Client Education</u>: Clients are provided the Electrical Safety Workbook which includes information on over-current protection, overloading circuits, and basic electrical safety/risks.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord

Fire Hazards

✓ Concur with WPN 11-6

Funding: IHWAP allows correction of fire hazards when necessary to perform weatherization work.

<u>Beyond DOE WAP Scope</u>: IHWAP funds from any source cannot be used to remedy certain conditions that constitute fire hazards, such as excessive accumulation of debris that make it impossible to safely perform weatherization work beyond the limits of the Health and Safety Budget.

<u>Standards For Remedy</u>: Assessment and audit will include a check for fire hazards. Work procedures will include a check for fire hazards as well.

Standards For Deferral: Certain conditions that constitute fire hazards, such as excessive accumulation of debris that make it impossible to safely perform weatherization work and cannot be remedied within the health and safety budget is grounds for deferral.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of and inspection for fire hazards.

IHWAP's five day contractor certification curriculum includes fire hazard training. All LAA weatherization staff, weatherization contractor's' workers must complete either OHSA 15 or OSHA 30 hour training which

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includes training on fire hazards and the workplace.

Client Education: Clients are informed of observed fire hazards.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord

Formaldehyde, Volatile Organic Compounds (VOCs) and other Air Pollutants

✓ Concur with WPN 11-6

Funding:Removal of pollutants is allowed and is required if they pose a risk to workers.

<u>Standards For Remedy</u>: Sensory inspection is part of the inspection process. Removal of pollutants is allowed and is required if they pose a risk to workers.

Standards For Deferral: If pollutants pose such a risk and they cannot be removed or the client will not allow removal, the property is deferred.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes how to recognize potential hazardous and when removal is necessary

<u>Client Education</u>: Clients are advised where there is an observed risk and be provided with written materials on safety and proper disposal of household pollutants.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Procedure and Protocol: Removal of pollutants is allowed and is required if they pose a

Injury Preventions for occupants and workers

✓ Concur with WPN 11-6

Funding: Minor repairs and installation is allowed only when necessary to effectively weatherize a home.

<u>Beyond DOE WAP Scope</u>: Repairs for injury prevention other that when necessary to effectively weatherize a home are not allowed to be funded with IHWAP funds from any source.

<u>Standards For Remedy</u>: Assessor observation at assessment is the primary means of identification of injury risks to workers such as repairing stairs or replacing handrails.

Training: Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes injury prevention identification and management.

IHWAP's five day contractor certification curriculum includes injury prevention awareness. All LAA weatherization staff, weatherization workers must complete either OHSA 15 or OSHA 30 hour training which includes training on injury prevention in the workplace.

Client Education: Clients are informed of observed hazards and associated risks.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Lead Based Paint Hazards

✓ Concur with WPN 11-6

<u>Funding</u>: Lead safe work practices may be included in the SIR justified cost of the measure or other otherwise qualified health and safety measures or incidental repair made within budget.

Beyond DOE WAP Scope: Lead based paint hazard abatement is not allowed with IHWAP weatherization

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funding.

<u>Standards For Remedy</u> Testing for lead based paint hazards is allowed. All homes built prior to 1978 is treated as if they have lead-based paint and lead-safe methods are employed while working on painted surfaces that are being repaired or retrofitted for energy efficiency. Technologies or techniques are employed to ensure that workers work safe to protect themselves and the IHWAP clients.

Job site set up and cleaning verification is required by a Certified Renovator. Disturbing these surfaces in the course of installing weatherization measures will require lead-based paint safe work practices.

<u>Summary of Lead-based Paint Safe Work Practices</u> - Working Wet – DCEO trains its LAAs to "work wet" and carefully clean up by using HEPA-VACS to vacuum dust and debris raised when Weatherization work is being done. Family members will not be allowed in the immediate work area while the work is in process.

- i. Visqueen the work area Visqueen the work area means the crews and Contractors would place 6mil Visqueen in the immediate area where they are working and a painted surface is disturbed so that any waste materials would fall on to the Visqueen. The Visqueen is to be taped to the floor so it does not slide around and it stays in place. Air distribution systems in the immediate areas warm air supply and return ducts must be taped.
- ii. Working Wet Working wet means that during the preparation of work surfaces or nailing, screwing fasteners, sawing, or disturbing the painted surfaces, the area should be misted with plain water so as to keep dust levels down. Wetting the painted surfaces keeps the dust levels down and avoids creating and spreading dust. This technique has been shown effective in keeping lead levels to a minimum. Lead poisoning from lead-based paint and products has been shown to be caused principally by air borne dust from lead-based products.
- iii. Cleaning up the Area When the work is completed, the Visqueen must be folded up into itself and double taped. The work area must be vacuumed with a HEPA-VAC, and then washed down with a detergent. The area again is vacuumed with a HEPA-VAC. All Local Administering Agencies will distribute the Lead booklets (Renovate Right) at time of assessment, prior to the weatherization work beginning. Workers are required to employ LSW on EVERY home, whether there is more or less than two square feet of interior lead-based paint estimated. DCEO has informed all Sub grantees that although pollution occurrence insurance is now optional, it is a good idea to continue to carry it. DCEO will monitor for LSW compliance at the local contractor and crew level as a series of un-announced monitoring visits. Any non-compliance issues are dealt with using the procedures outlined in the Problem Resolution measures listed below, in the Monitoring section.

<u>Training:</u> All weatherization workers and LAA coordinators, assessors and final inspectors have Lead Safe Worker Training and EPA Lead Safe Renovator training.

DCEO will continue to provide the revised Lead Safe Work (LSW) Practices to all WAP Sub grantee staff and contractors as necessary. Everyone has initially been trained. IHWAP will offer this training to new staff and contractors on an ongoing basis. This training is conducted with the assistance of the Indoor Climate Research and Training program of the Illinois Sustainable Technology Center at the University of Illinois at Champaign

All Sub-Grantees and building shell contractors will continue to receive the EPA Certified Lead Renovator training. We will make this training available several times a year on an "as needed" basis. DCEO / OEA will continue to ensure that new local contractors are certified by EPA as "Firms". This training is conducted with the assistance of the Indoor Climate Research and Training program of the Illinois Sustainable Technology Center at the University of Illinois at Champaign.

Client Education:

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

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Mold and Moisture

✓ Concur with WPN 11-6

<u>Funding:</u> Limited water damage repairs that can be addressed by weatherization workers and correction of moisture and mold creating conditions are all allowed when necessary in order to weatherize the home ad to ensure the long term stability and durability of the measures

<u>Beyond DOE WAP Scope</u>: IHWAP funding from any source cannot be used to address severe Mold and Moisture issues nor can it be used for mold testing.

<u>Standards For Remedy</u>: The sub grantee's assessor shall visually inspect at the time of the audit. Moisture meters as a diagnostic tool are employed pre and post final inspection. During the course of the energy audit, Weatherization staff asks the client about the problems of energy use in their home. In that interview the clients are asked about moisture and mold. A checklist for mold and moisture is included as documentation of this discussion, and is included in the client file. The Local Administering Agency staff uses the conversation with the client to assist in identifying the potential deficiencies and weatherization work for the home.

<u>Standards For Deferral</u>: Where severe Mold and Moisture issue cannot be addressed, deferral is required.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes the national curriculum.

Awareness of moisture and mold hazards for the weatherization program is detailed in the Weatherization Standards published in the administrative guidance for the Illinois Home Weatherization Assistance Program (IHWAP), which is updated each year. In addition, the Weatherization Field Standards Manual contains a section on "Mold and Moisture Hazards" including text, general guidelines, and photographs. The Indoor Climate Research and Training program of the University of Illinois Sustainable Technology Center has prepared this section. The Weatherization Field Standards Field Manual also contains a section under "Health and Safety Issues" on "Moisture" and recommendations on potential solutions. The Weatherization Field Standards Field Manual is distributed to all Local Administering Agencies, and all IHWAP contractors

<u>Client Education</u>: In addition to the interview, the EPA publication "A Brief Guide to Mold, Moisture, and Your Home" is distributed to all WAP clients

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Mold Protocols:

Awareness of moisture and mold hazards for the weatherization program is detailed in the Weatherization Standards published in the administrative guidance for the Illinois Home Weatherization Assistance Program (IHWAP), which is updated each year. In addition, the Weatherization Field Standards Manual contains a section on "Mold and Moisture Hazards" including text, general guidelines, and photographs. The Indoor Climate Research and Training program of the University of Illinois Sustainable Technology Center has prepared this section. The Weatherization Field Standards Field Manual also contains a section under "Health and Safety Issues" on "Moisture" and recommendations on potential solutions. The Weatherization Field Standards Field Manual is distributed to all Local Administering Agencies, and all IHWAP contractors

Occupant Pre-existing or Potential Health conditions

✓ Concur with WPN 11-6

Funding: Temporary relocation of at-risk occupants is allowed on a case by case basis.

<u>Beyond DOE WAP Scope</u>: If cost of relocation is beyond the scope of the health and safety budget, no IHWAP funds from any grant source may be used.

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<u>Standards For Remedy</u>: Initial client interview will include questions on known or suspected health concerns. Clients are screened again during audit

<u>Standards For Deferral</u>: If cost of relocation is beyond the scope of the health and safety budget, the home must be deferred.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of potential hazards and how to assess occupant preexisting conditions and determining what action to take if the home is not deferred

<u>Client Education</u> All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Occupational Safety and Health Administration (OSHA) and Crew Safety

✓ Concur with WPN 11-6

<u>Standards For Remedy</u>: Weatherization workers will follow OSHA standards and Material Safety Data Sheets (MSDS) and take precautions to ensure the health and safety of themselves and other workers. MSDS must be posted wherever workers may be exposed to hazardous materials.

<u>Training:</u> Agency Weatherization coordinators, assessors and final as well as all personnel installing weatherization measures whether employees of the sub-grantee or their contractors will have completed the OSHA 10 hour or OSHA 30 hour training. Crew leaders must have the OSHA 30 hour training.

OSHA and MSDS Compliance: *

DCEO provides Health and Safety training to all WAP crews, contractors and Local Administering Agency field staff. WAP agencies will comply with OSHA requirements. Costs for tools, and equipment related to Health and Safety for applicable WAP staff is paid from IHWAP Program Support funding. If the items are for Health and Safety Training, the costs may also include training and technical assistance (T&TA) funds. Health and Safety requirements are contained in the Weatherization Field Standards Manual. The Weatherization Field Standards Manual details the requirement to use personal safety equipment when necessary.

Training also includes the requirement and use of Material Safety Data Sheets (MSDS), first aid techniques, and related safety equipment like ladders and respirator protection and proper worker safety techniques. During this program year, DCEO will again be requiring the 10- hour Construction Worker and 30-hour Construction Supervisor OSHA safety course for all Weatherization contractors and crews. DCEO will periodically monitor Weatherization jobs in progress to ensure that contractors /crews are utilizing safe work practices according to all program requirements.

Pests

✓ Concur with WPN 11-6

Funding: Pest removal is allowed only where infestation would prevent weatherization. Screening of windows and points of access is allowed to prevent intrusion.

<u>Beyond DOE WAP Scope</u>: Pest removal or eradication not related to installation of weatherization measures is not allowed.

<u>Standards For Remedy</u>: At assessment the assessor will determine the presence and degree of infestation and risk to workers.

Standards For Deferral: Infestation of pests may be cause for referral where it cannot be reasonable removed or poses health and safety concern for workers.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes how to assess the presence and degree of infestation, associated risk and need for deferral.

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<u>Client Education</u>: Clients are informed of observed conditions constituting pest related health risks.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Radon

✓ Concur with WPN 11-6

Funding: Testing may be allowed in locations with high radon potential

<u>Beyond DOE WAP Scope</u>: Other than covering exposed dirt with vapor barriers, the costs of radon mitigation cannot be funded with IHWAP funds from any grant source. *

<u>Standards For Remedy</u>: Whenever site conditions permit, exposed dirt must be covered with a vapor barrier except for mobile homes. In homes where radon may be present, precautions should be taken to reduce the likeliness of making radon issues worse.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes radon awareness: what it is, how it occurs, what factors may make it worse and what weatherization measures may be helpful.

Client Education: Clients are provided with the EPA Consumer's guide to Radon.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Refrigerant

✓ Concur with WPN 11-6

Funding: The costs of refrigerant handling and safe disposal is included in the cost of the relevant in retrofit, health and safety, or incidental measure

<u>Standards For Remedy</u>: Refrigerant is reclaim per the Clean Air Act 1990, section 608, as amended by 40 CFR82, 5/14/93.

<u>Training:</u> Workers handling refrigerants are required to have EPA approved section 608 type I or universal certification.

Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes proper handling of refrigerants

IHWAP's five day HVAC contractor certification curriculum and its Mobile Furnace Lab trainings will include proper handling of refrigerant.

Client Education: Clients are advised to not disturb refrigerants.

Disposal Procedures: <u>Procedure and Protocol</u>: Refrigeration appliances that are replaced are disposed of according to the environmental standards in the Clean Air Act (1990), Section 608,as amended by the Final Rule, 40 CFR 82, May 14, 1993. The party recovering the refrigerant must possess an EPA-approved Section 608 Type II license or an approved universal certification.

Smoke, Carbon Monoxide Detectors and Fire Extinguishers

✓ Concur with WPN 11-6

Funding: Installation of smoke/CO detectors is allowed where detectors are not present or are inoperable.

<u>Beyond DOE WAP Scope</u>: Replacement of operable smoke / CO detectors is not an allowable cost with IHWAP funds from any source.

<u>Standards For Remedy</u>. In all houses weatherized at least one operational smoke detector is installed. Smoke detectors are installed when one is not present or operational. Batteries are installed to make

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existing smoke detectors operational when necessary. Smoke detectors are installed by the contractor and not left with the client.

Smoke / CO Detector Installation:

Smoke / CO Detectors are installed per manufacturer's instructions.

One smoke detector is installed on each level of the home on the ceiling or six inches below the ceiling on the wall. Additional smoke detectors are installed so that there is one smoke detector located within 15 feet of every room used for sleeping. When applicable, one additional smoke detector is installed at the base of the basement stairwell when applicable.

Smoke detectors will not be installed near kitchen stoves or bathroom showers, within 12 inches of exterior windows and door, in front of supply air registers or in unoccupied attics.

Existing smoke detectors are relocated as necessary

CO detectors are installed on each separate living level of the home where household members frequently spend time. CO detectors are not installed in unfinished basements.

When smoke alarms / CO detectors are installed, the installer will test them for proper performance assure that they contain new batteries or, in the case of hard-wired smoke alarms or CO detectors, are wired to a circuit that is energized at all times and will not wired to a ground-fault circuit interrupter (GFCI).

Smoke alarms that are powered by a battery will emit a signal when the battery is losing power. All installation hardware, including a screw mounting bracket, should be included with the alarm. Smoke alarms installed are approved by Underwriters Laboratories (UL).

CO alarms will not be install alarms in the following areas: near bathrooms or in shower areas, in closets, crawl spaces or unheated areas where extreme hot or cold temperatures occur, within 5 feet of fuel burning appliances, close to adjacent walls or in comers, near bathtubs or basins, directly above or below return air grilles or supply registers, and behind drapes, furniture, or other objects that could block air flow to the CO alarm.

CO alarms will meet or exceed UL2034-98 and/or IAS696 standards, will plug-in models with separate battery backup, will have a manual test and reset button, and will have a five-year warranty on the detector and sensor. The expiration date, as warranted by the manufacturer, is written on the front of the alarm in permanent ink.

<u>Standards For Deferral</u>: Absence or condition of smoke detectors will not be reason for deferral: Smoke detectors are installed when one is not present or operational.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of the need for smoke alarms / CO detectors and their proper installation.

<u>Client Education</u>: LAA personnel review smoke alarm testing procedures with clients following alarm installation and advise them regarding battery replacement as appropriate. Clients are informed about the purpose and features of the CO alarms and informed on what to do if the alarm sounds.

Solid Fuel Heating (Wood Stoves, etc.)

✓ Concur with WPN 11-6

<u>Funding:</u> Maintenance, repair, and replacement of primary indoor heating units is allowed where occupant health and safety is a concern. Maintenance and repair of secondary heating units is allowed.

<u>Standards For Remedy</u>: Agency inspectors inspect chimney and flue of all wood stoves and conduct combustion appliance zone depressurization testing.

<u>Training</u>: Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes how to perform CAZ depressurization testing, proper inspection of flue and general safety issues of wood stoves.

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<u>Client Education</u>: Where assessment detects evidence of this health and safety hazard, sub grantee staff at assessment or at final inspection will counsel the client wood stove safety including recognized depressurization.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Space Heaters / Stand Alone Electric

✓ Concur with WPN 11-6

Funding: Removal is allowed.

<u>Beyond DOE WAP Scope</u>: Repair, replacement, or installation of a stand-alone electric space heater is not allowed by IHWAP funding from any source.

Standards For Remedy: Removal is recommended to clients who use them.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of the hazards of stand-alone electric space heaters.

<u>Client Education</u>: All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the

Space Heaters Unvented Combustion

✓ Concur with WPN 11-6

Funding: Removal of unvented combustion space heaters is not an allowable IHWAP cost.

<u>Beyond DOE WAP Scope</u>: DOE WAP funds will not be used to remove an unvented combustion space heater.

<u>Standards For Remedy</u>: Removal is required, except as secondary heat where the unit conforms to ANSI 21.11.2. Units that do not meet ANSI Z21.11.2 are removed before weatherization but may remain until a replacement heating system is in place.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes understanding the dangers of unvented space heaters.

<u>Client Education</u>: Clients are informed of the dangers of unvented space heaters – CO, moisture, NO2, and that CO can be dangerous even if a CO alarm does not sound.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property shall be listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

Space Heaters, Vented Combustion

✓ Concur with WPN 11-6

For purposes of health and safety vented combustion space heaters are treated as furnaces, venting is tested consistent with furnaces and combustion safety protocol for draft, CO and supply line leaks under the same protocol as furnaces.

Spray Polyurethane Foam (SPF)

✓ Concur with WPN 11-6

<u>Funding</u>: Health and safety precautions related to the installation of SPF is included in the costs of the associated measure.

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<u>Standards For Remedy</u>: Installers shall follow EPA recommendations when working within a conditioned space or when SPF fumes become evident within the conditioned space. When working outside the building envelope, isolate the area where foam is applied, precautions are taken so that fumes will not transfer to inside conditioned space, and exhaust fumes outside the home. During installation installers will check for penetrations in the building envelope and make sensory inspection inside the home for fumes during foam application.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes training on the use of various products with specification for each application type, MSDS sheets, and temperature sensitivity of SPF products.

<u>Client Education</u>: Before installation notification are given to clients of plans to use two part foam and the precautions that may be necessary.

Ventilation

✓ Concur with WPN 11-6

<u>Funding</u>: When mechanical ventilation systems are required to meet the ASHRAE 62.2 requirements costs are allowable health and safety expenses.

<u>Standards For Remedy</u>: Compliance with ASHRAE 62.2 ventilation compliance to the fullest extent possible is met in all homes weatherized. Where acceptable indoor air quality already exists as defined by ASHRAE 62.2, implementation is not required. Existing fans and blower systems are updated if not adequate. See ASHRAE 62.2 Compliance below.

<u>Training</u>: Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes ASHRAE 62.2 training including proper sizing, evaluation of existing and new systems, depressurization tightness limits, critical air zones, etc.

IHWAP has provided and continues to provide ASHRAE 62.2 Basic training to all sub grantee weatherization field staff.

IHWAP's five day contractor certification curriculum includes ASHRAE 62.2 training including proper sizing, evaluation of existing and new systems, depressurization tightness limits, critical air zones, etc.

<u>Client Education</u>: Clients are provided with information on function, use and maintenance of ventilation system and components when ventilation fans are installed. Clients are provided a disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.

ASHRAE 62.2 Compliance:

OEA's 35 agencies have fully implemented ASHRAE 62.2 compliance. Beginning in fall of 2012 agencies use the IHWAP 62.2 spreadsheet to input blower door values and calculate air infiltration targets and ventilation requirements. The worksheet calculates leakage allowances and minimum mechanical ventilation

Agencies use the ASHRAE 62.2 protocol to meet the minimum requirements for mechanical and natural ventilation intended to provide acceptable indoor air quality in low- rise buildings of three stories or less, including single-family homes.

The ventilation system may consist of continuously operating bathroom and/or kitchen exhaust fans, a supply-only system or a balanced system. The required airflow ismeasured following installation of the ventilation system to assure the desired airflow has been achieved. Airflow may be measured with a flow hood, flow grid or other measuring device. Accessible override control is provided to the occupants.

Local exhaust fan switches and "fan on" switches are permitted as override control.

Window and Door Replacement, Window Guards

✓ Concur with WPN 11-6

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<u>Funding:</u> Replacement, repair, or installation is not an allowable health and safety cost but may be allowed as an incidental repair or an efficiency measure if cost justified.

Standards for Deferral: Owners are referred to other resources if they exist.

<u>Training:</u> Agency Weatherization coordinators, assessors and final inspectors are certified through IHWAP's ten week Training Certification Program. TCP curriculum includes awareness of guidance and IHWAP policy and standards regarding window and door replacement and window guards.

Client Education: Clients receive information on lead risks.

All conditions an Energy Auditor/Assessor believes constitute an immediate or potential risk to an individual or property is listed on DCEO's Hazardous Condition Form at the time of assessment and a copy is given to the client and/or landlord.

V.8 Program Management

V.8.1 Overview and Organization

The weatherization funds DOE allocates to Illinois are the responsibility of the Governor to administer. The Department of Commerce and Economic Opportunity (DCEO) has been designated as the administering entity for weatherization services. The Weatherization Assistance Program is located within the Office of Energy Assistance. Weatherization services have been a responsibility of DCEO or a predecessor agency since 1977. In Illinois, the weatherization program is called the Illinois Home Weatherization Assistance Program (IHWAP). IHWAP provides Illinois' low-income residents with the labor and materials needed to weatherize their homes.

There will be three funding sources used to operate the IHWAP program. These are:

Weatherization Assistance Program (WAP) funding from DOE, Low Income Home Energy Assistance Block Grant funds from the U.S. Department of Health and Human Services (HHS), and State Supplemental Low Income Energy Assistance Funds.

V.8.2 Administrative Expenditure Limits

The Department has determined an increase in DOE regulations and the addition of Health and Safety activities have ultimately led to an increased administrative workload and additional paperwork. The Transparency policies that resulted with the ARRA funding also produced additional administrative burdens. With the drastic reduction in funding, the diminished resources have placed more duties on the Administrative areas of the WAP. As a result, the Local Administering Agencies have been confronted with increased program administration costs. For these reasons, the Department is increasing administrative costs to 10% for all WAP Subgrantees that receive less than \$350,000.

Local agencies that receive \$350,000 or more in DOE funding will be limited to 5% Administrative funds. Currently only one local IHWAP agency's DOE grant exceeds \$350,000. The remaining 35agencies that are below the threshold of \$350,000 will receive 10% Administrative funding. Any WAP entities that are added at a later date, and are under a funding level of \$350,000 will be considered for additional Administrative funding up to 10%.

V.8.3 Monitoring Activities

There is a total of 17 staff within the Office of Energy Assistance (OEA) whose duties include the monitoring of weatherization activities. However, this staff does not spend their full time on monitoring activities. On a full time equivalent (FTE) basis, 17 divisional FTEs are available to monitor weatherization activities. These 17FTEs are split into three sub-divisions within the Office of Energy Assistance. This includes six (6) FTEs in the Assessment and Training Unit (ATU), six (6) FTEs in the Technical Services Unit, three (3) FTEs in the Fiscal Monitoring Unit and two (2) FTEs in supervisory/managerial roles.

The *Technical Services Unit* will monitor the quality of work (including file reviews, invoicing and costing, contractor payment and on-site inspections) It conducts routine desk monitoring, file review and field inspections

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of LAA weatherization activities.

Weatherization Subgrantees will be visited at least two times per year by OEA staff. Each of these visits may be made by a different unit within OEA and will cover different subject matter. These visits will be as follows:

The Assessment and Training Unit (ATU) is responsible for developing uniform policy and guidelines for weatherization assessment, work standards, training and final inspection; maintaining training and certification standards

The ATU staff will cover Assessment (Energy Audit) monitoring and provide training to Local Administering Agency staff and contractor/crew staff as needed. These trainings will focus on programmatic updates, correction of identified deficiencies to ensure programmatic compliance and weatherization improvement measure(s) application procedures to increase installer skill levels. The Assessment and Training Unit will work in conjunction with the Indoor Climate Research and Training Program at the University Illinois Sustainable Technology Center on the development and implementation of WAP training initiatives including the Assessor (Energy Auditor)/Final Inspector (Quality Control Inspector) Training and Certification Program and Contractor Certification Program. The Training and Assessment unit will also develop uniform policy and guidelines for weatherization assessment, work standards, training and final inspection; and maintaining training and certification standards.

The ATU and Technical Services Unit will collaborate annual to produce a risk assessment of each Sub-grantee's weatherization program and from that assessment a monitoring plan and *Plan for Improvement* which will focus monitoring and training activities for that Sub-grantee.

The Fiscal Monitoring Unit will monitor the financial aspects of implementing the WAP.

OEA will attempt to conduct a comprehensive fiscal monitoring visit to each LAA at least once per year.

MONITORING OF COMPLETED UNITS, MATERIALS AND SUBGRANTEE PRE- AND POST-WORK INSPECTIONS

The Technical Services Unit and the Assessment and Training Unit are responsible for the review of programmatic requirements; including client file reviews and material specifications, quality, and cost-effectiveness. A minimum of five percent of the completed files will be reviewed. Programmatic monitoring is conducted at each Subgrantee agency by the assigned Weatherization Specialist at least annually and more frequently, if needed. The Subgrantees provide comprehensive electronic program reporting on a monthly basis. These reports are thoroughly analyzed by Technical and Management staff.

Illinois' in-house procedures for review of each of these areas are described in the following sections:

- 1. On-site Monitoring of Completed Units. Five percent of the units completed by a Subgrantee are reviewed by the Technical Services unit. Reviews are conducted using a standardized job rating sheet. This job rating sheet rates the pre-work inspection (Assessment/Energy Audit), the actual work done, and the post-work inspection for each major category of energy loss.
- 2. File Reviews for Completed Units. Technical Services Unit staff randomly selects a minimum of five percent of the completed files to review.
- 3. Material Specifications Review. Administrative and Programmatic Manual, Volume I, Program Operations, require all Subgrantees to procure only those materials specified in federal regulations and detail these specifications for use by Subgrantees. The Administrative and Programmatic Manual, Volume II: Procurement requires all Subgrantees to keep a complete record of their materials procurement process (including material specifications) on file for review by DCEO staff. These procurement files are required and, if material specifications are not met, the Subgrantee must rebid that item. The Technical Services Unit considers whether the minimum product specifications are adequate to meet the needs of each Subgrantee's climatic conditions and/or work efficiencies. If the minimum specifications do not appear to be adequate, the reviewer may recommend the Subgrantee change its minimum specifications on the next bid.
- 4. Monitoring Material Prices for Cost Effectiveness. The material procurement files noted above will also contain a record of the prices bid and the price accepted for each type of material used by the

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Subgrantee. These prices are compared to the prices paid in the same area of the state by neighboring Subgrantees and adjusted for agency specific needs (e.g. Subgrantee has no warehouse so price includes "just in time" delivery service). The performance of each type of material is also reviewed during on-site inspections. Products that do not perform as specified are to be rejected in the next round of Subgrantee bidding.

5. Pre- and Post-work Inspection Reviews. As previously indicated, the Technical Services Unit and Assessment and Training Unit uses a job rating sheet when performing on-site reviews. This job rating sheet was developed to evaluate not only the quality of work, but the acceptability of both the pre- and post-work inspection. When appropriate, further training is required of a staff person that has performed a significant number of unacceptable pre- or post-work inspections.

MONITORING TOOLS- DCEO utilizes a Weatherization Program Operation Monitoring Tool and Job Rating Sheet. Other tools utilized by DCEO include the Annual Administrative Review form, the Fiscal Management Review form, and the Fiscal Review form. Each of these tools is described in the sections which follow.

Fiscal Monitoring Review- Covers the areas of financial reporting, account reconciliation, cash analysis, cost allocation, cash disbursements. The significant activity dates (e.g. application date, assessment date, date work began, date work completed, date final inspected).

Required documentation (e.g., WeatherWorks Work Order form, Cost Reporting (invoicing) screens in WeatherWorks, Release of Lien Waiver form, Final Inspection sheet, etc.).

Significant findings (e.g. timelines of payment, fiscal priorities not followed computations not accurate, etc.). The Fiscal Review also covers the areas of internal control, subcontract monitoring, accounting procedures, cost classification and documentation, fiscal audit review, and cash management.

System for Problem Resolution - Once a finding is noted during a monitoring visit, the reviewer is responsible for correctly assessing how best to address it. DCEO reviewers are trained and counseled to keep the following in mind when determining how to address a finding.

- 1. How serious is the finding? For example, did the Subgrantee forget to include a client notification letter in the file (a state procedural requirement) or was income documentation missing (a legal requirement)?
- 2. What is the level of significance? For example, did the Subgrantee miss one item on the equipment inventory list or are fifteen percent of the items purchased over the last year missing?
- 3. Has this been a problem in the past? For example, did the Subgrantee have unacceptable pre-work inspections in past years or previous monitoring visits?

Depending on the seriousness, significance, and repetitiveness of the finding, the reviewer has several options on how to attempt to resolve the issue. These options, and when they are considered appropriate follow.

Verbal counseling-findings that are not serious, significant or repetitive are usually resolved through verbal counseling. The reviewer speaks to the Subgrantee staff, makes them aware of the finding, asks that they correct the problem, and requires future compliance or verbal counseling is documented as an observation in the reviewer's monitoring letter.

Technical assistance-findings that are serious or significant but that have not been a problem in the past call for technical assistance. While the Subgrantee is required to correct the finding, as a "first time offender" they are given technical assistance on how to improve procedures and ensure compliance in subsequent weatherization activities.

Corrective actions-an agency with a very serious or significant problem or a finding addressed in previous visits is required to develop a corrective action plan. The corrective action plan is a permanent change in procedures aimed at resolving the problem noted. Any corrective actions to be required of the Subgrantee must be addressed in the exit conference with the executive director (or designated representative). From the date of the reviewer's official correspondence, a Subgrantee is given fifteen calendar days to submit a written corrective action plan. The reviewer must then revisit the Subgrantee to determine whether the corrective action plan has effectively resolved the problem. A serious or significant problem that remains unresolved at

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the end of the program year may lead to a conditional grant, a limited grant or no designation.

The following monitoring will be completed for each WAP Subgrantee:

- 1. Programmatic and Management Monitoring
- 2. Annual Subgrantee Review Periodic Electronic Desk Audits RRP and LSW Review Equipment/ Inventory/Materials Reporting
- 3. Program Requirements
- 4. Procurement Review
- 5. Training & Technical Assistance Needs
- 6. Subgrantee Field Monitoring
- 7. Client File Review (paperwork, Eligibility, Work Orders, Invoicing etc.) Assessments/Energy Audit Review
- 8. Quality Control Review Health & Safety Review Final Inspection Review Financial Monitoring
- 9. Financial Management/Accounting Systems and Operations
- 10. Audits Payroll/Personnel Vehicles and Equipment Invoicing
- 11. Annually, the Department will summarize each of its Subgrantee's financial reviews, program monitoring reports, and any outstanding issues and develop an annual Subgrantee Evaluation/Monitoring Analysis that will identify each Subgrantee's needs, strengths, and weaknesses. The results of this monitoring analysis will be considered during the annual planning for the following year's grant and will be used to develop a Subgrantee annual risk analysis and plan for improvement.
- 12. Monitoring Findings Matrix
- 13. Minor Findings
- 14. All areas of noncompliance with the IHWAP Field Standards Manual and/or IHWAP Program Operations Manual not considered a Major finding will be considered a Minor finding. Minor findings may include but are not limited to sloppy work, missing attic insulation measuring sticks, incorrect documentation, etc.
- 15. Minor Findings will require a response from the Subgrantee, detailing the corrective action taken to alleviate the deficiency identified, if specifically noted in the Field Visit Report.
- 16. When similar Minor Findings are found on two or more consecutive Monitoring Visits, those Minor Findings will be elevated to Major Findings.
- 17. Minor Findings could result in the requirement of additional training for Subgrantee and/or contractor personnel.

Major Findings

- 1. Any of the following criteria constitutes a *Major Finding*:
 - A. The health and safety of clients, Subgrantee staff, and contractor/crew staff, or the structural integrity of the building is compromised by the work completed with IHWAP Funds.
 - B. A health and safety problem is created by, exacerbated by, or not corrected by the delivery of IHWAP-funded services.
 - C. The omission of a required procedure that addresses health and safety concerns that are within the scope of weatherization.
 - D. The omission of a required measure or technique with major energy savings potential, as determined by the Savings-to-Investment Ratio in the WeatherWorks System. Weatherization measures that are paid for with IHWAP Funds that are not applied to the dwelling.
 - E. Expenditure of IHWAP funds for items that exceed the stated cost limits, without prior written OEA

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authorization as specified in IHWAP Program Operations Manual. Additional funds that exceed the cost limit specified will be considered as disallowed costs and must be removed from WeatherWorks or refunded to DCEO. All fiscal files, records, and documentation must be revised accordingly.

- F. Poor quality workmanship that significantly affects the performance of weatherization measures.
- G. Expenditure of IHWAP funds on measures that are not approved under the IHWAP or required for mitigation of health and safety concerns.
- H. Expenditure of IHWAP funds on Retrofit measure that do not yield an acceptable Savings-to-Investment Ratio as determined by the WeatherWorks System.
- I. Any action or lack of action that would threaten the integrity of the IHWAP and/or its ability to receive future grant funding.

2. A monitoring visit report from OEA that contains Major Findings:

Requires an immediate response from the Subgrantee receiving the finding as defined in the Monitoring Visit Report generated by OEA.

Requires that corrective action must be taken.

Could result in disallowed costs that the Subgrantee would have to refund to DCEO.

Could result in an increased monitoring frequency by OEA.

Could result in the requirement of additional training for the Subgrantee and/or

LAA/contractor personnel as specified by OEA.

Could result in the recommendation of High Risk status or Grant Default Status for the Subgrantee receiving the Major Finding. Subsequently, Special Conditions will be placed on the Subgrantee's grant agreement(s).

Continued Major Findings may result in the termination of the Subgrantee's IHWAP grant agreement with OEA.

High Risk Status or Grant Default Status

The occurrence of a substantial number of, or repeated, Major Findings may result in a decision by the DCEO administration that a Subgrantee be placed on High Risk status or Grant Default Status.

If a Subgrantee is placed on High Risk status or Grant Default Status, special conditions will be placed on the grant which will affect the Subgrantee's ability to draw IHWAP funds. Those special conditions will include but not be limited to additional reporting requirements as specified by OEA, a detailed corrective action plan to remedy monitoring deficiencies, and limited or total restrictions on the availability of cash requests from the appropriate IHWAP grants, or all DCEO funding.

If a Subgrantee is placed on High Risk status or Grant Default Status, the Subgrantee will be placed on probationary status for up to two years following the date of the probation period initiation.

Failure by the Subgrantee to comply with the special conditions placed on the grant agreement and/or continued non-compliance or Major Findings will be grounds for termination of the grant agreement between the Subgrantee and DCEO.

After failing to comply with Weatherization grant conditions, or the correction of grant deficiencies, the Subgrantee will be referred to DCEO Legal Counsel for review and disposition.

Notwithstanding any of the above, DCEO may suspend or terminate a contract without prior written notice upon a finding of substantial non-compliance or substantial breach of grant agreement.

DCEO will submit the monitoring report to the LAA within 30 days of the monitoring visit.

V.8.4 Training and Technical Assistance Approach and Activities

How a State assesses the training needs of its Subgrantees.

Sub grantee training and technical assistance (T&TA) needs are determined by training assessment surveys,

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Weatherization Technical Services Unit (based on quality control visits) and requests submitted to DCEO by Subgrantees. The subgrantee T&TA budget is calculated on the basis of the amount of training that will be provided by DCEO during the program year and the historical costs associated with subgrantee travel, lodging, etc.

Additionally, DCEO will conduct an annual risk assessment of the subgrantee's weatherization program. Using that assessment DCEO will develop with the grantee an improvement plan that will identify the grantee's training needs and available resources for meeting them. Where the subgrantee is required by the monitoring process to development and implement a Corrective Action Plan (CAP), the CAP may also identify training needs of the subgrantee.

What training the State will provide for subgrantee staff and if attendance is mandatory.

Listed below are the major categories of basic training and technical assistance (T&TA) to be provided to Subgrantees plus a description of each category that also outlines the resources to be used to provide the training and technical assistance and whether attendance is required.

Whether the Grantee requires any certification or training of Subgrantee staff prior to hire or by date certain from date of hire.

Training and Certification Program (TCP) - Certification of subgrantee staff began in 1988. While it is a part of our overall T&TA plan, it is primarily subgrantee basic training (the certification process is described in more detail in Subsection C). The TCP is divided into ten weeks of training:

- Weatherization Basics and Assessment Process (5 days)
- Basic Heat Transfer (5 days)
- Building Types and Fundamentals (5 days)
- Building Diagnostics (5 days)
- Thermography (Infra-Red) and Assessment Basics (5 days)
- Heating Systems (5 days)
- Advanced Heating Systems (5 days)
- Air Conditioning, Heat Pumps, and Air Flow (5 days)
- LSW and Moisture/Mold, IAQ, Health and Safety, Hazardous Materials (5 days)
- Assessment Exam, Data Entry, Proficiency Exam (5 Days)

These training modules will be held throughout the year with class size limited to approximately twenty persons. Trainers will include both OEA Training and Assessment Unit and vocational/post-secondary specialists. Attendance will be mandatory for subgrantee coordinators, assessors, and final inspectors.

- State Conference This conference explains new policies and procedures and provides general technical and management training. Trainers for the major portion of the conference will be DCEO and subgrantee staff, with several outside speakers. Attendance is mandated for each subgrantee.
- Weatherization Coordinator Meetings Program meetings are held several times throughout the year.
 These one-day sessions provide programmatic updates and allow for the exchange of information
 among Subgrantees as well as input from Subgrantees to DCEO on topics of concern. Each meeting
 agenda deals with at least one major issue that is discussed at length (e.g., landlord contributions
 when weatherizing rental units). Attendance at these meetings is at the option of each subgrantee's
 Executive Director.
- Health and Safety Workshops Will be held to Instruct coordinators and workers on correct work techniques to avoid injuries. ASHRAE 62.2 procedures and policies will also be taught.
- National DOE Conference- Selected Subgrantees may be given T&TA funds to attend the National DOE conference if applicable. Reimbursement of subgrantee costs will cover conference fees, travel, lodging and meals/per diem.

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- Consumer Education DCEO will once again be emphasizing the importance of consumer education for energy conservation. This training will focus on pre-weatherization client education and Health and Safety.
- Mechanical and Architectural Contractors' Workshops These regional workshops will be held throughout the state to familiarize contractors with program rules, regulations, and informational updates. This year DCEO will be conducting mandatory workshops and certification on Dense-Pack Insulation Techniques, and Advanced 90% Furnace Installations and Advanced Air Sealing Techniques.
- Affordable Comfort Conference and other DOE Training Opportunities LAAs will be able to utilize their T/TA funding to attend these conferences.
- Mobile Home Training DCEO will be offering Mobile Home Training. One of the major focal points
 will be air-sealing opportunities, duct boot leakage, and insulation opportunities. We will be working
 with Cal Steiner to conduct these training sessions.
- Basic Electrical Theory and Application This class will be offered to new staff.
- OHSA Safety Crew and Worker Safety Training -This is the required OHSA 10 and 30-hour courses.
- Lead Safe Weatherization (LSW) Classes this training will be given to new WAP staff and workers, and will be arranged for by the local WAP agencies.
- Repair, Renovate and Painting (RRP) -This EPA training will be given to new WAP staff and workers.

The effectiveness of these activities as well as the need for additional training for grantee and subgrantee staff will be determined through a cooperative effort of DCEO's

Training of LAA Coordinators, Assessors, Final Inspectors and OEA Weatherization Technical Services Unit.

All current Assessors and Final Inspectors were required to successfully complete ten basic courses: Weatherization Basics and Assessment Process; Basic Heat Transfer; Building Types and Fundamentals; Building Diagnostics; Thermography and Assessment Basics; Heating Systems; Advanced Heating Systems; Air Conditioning, Heat Pumps and Air Flow; and LSW and Moisture/Mold, IAQ, Health and Safety, Hazardous Materials. Upon completion of these courses, an enrollee takes a proficiency test which covers the core material of all instructional classes. The DCEO-OEA Assessment and Training will then administer an Assessment /WeatherWorks Data Entry exam to all TCP trainees meeting the above stated prerequisites. Upon successful completion the trainee(s) will be certified as a Weatherization Assessor (Energy Auditor). All current Assessors and Final Inspectors were required to complete a previous version of these courses and pass the proficiency test within their first year of employment. New assessors and final inspectors must complete these courses and pass the test within nine months of being hired by a Local Administering Agency. If an existing or new Assessor or Inspector fails to achieve certification during the grace period, they will be prohibited from conducting assessments or inspections until they obtain re-certification. Enrollees are encouraged to complete one elective course or training as well.

Re-Certification Classes for the TCP are mandated every four years. The next scheduled round of TCP Re-Certification classes are scheduled for the 2014 program year.

Coordinators are required to earn a certificate by completing all ten courses. New coordinators must complete the course work within one year of being hired by a local agency. Coordinators who fail to complete the required training program will be prohibited from holding the position of weatherization coordinator until they successfully complete the course requirement.

Enrollment in any of the courses and certification is available to other weatherization staff, such as crew leaders, crew members, subcontractors or field superintendents.

How The State Compares Productivity And Energy Savings Between Subgrantees And How These Comparisons Are Used In The Development Of T&TA Activities And Priorities.

1. Quality Control - Quality control reviews are conducted year round by the Technical Services staff. Based

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on the findings of a quality control review, a subgrantee may receive on-site technical assistance aimed at improving individual subgrantee staff skills in assuring work quality. Technical assistance is provided by the DCEO reviewer or other staff specialists. Attendance is required for those persons specified by the quality control reviewer. Overall energy audits are reviewed to determine if the best Weatherization measures with the highest potential energy savings have been called for, or if additional training is needed.

2. "Hands-On" for Crews - Quality control reviews, standard monitoring and technical assistance sessions often point out the need for one-on-one work with crew members. Agency or staff-specific needs may include such items as basic energy conservation concepts, program requirements, and work techniques. Technical assistance is provided by DCEO staff. Attendance is required for those persons specified by the quality control reviewer, the monitor, or other staff.

Portion Of State T&TA Funds Will Be Allocated For State Program Oversight Efforts, How Such Funds Will Be Apportioned:

DCEO will be retaining about 70% of the training and technical assistance (T&TA) funding to contract the Training and Certification Program (TCP) and other training activities to the Indoor Climate Research and Training program (ICRT) of the Illinois Sustainable Technology Center at the University of Illinois at Champaign. A portion will also be used to help support the two IL WAP Training Centers. DCEO staff developed TCP with the assistance of the Weatherization Coordinators' Working Group. The coordinators' working group consisted of nine local coordinators and representatives from the Policy Advisory Council. This group was involved in all phases of the development process and the TCP represents a consensus of that group.

- 1. TCP Delivery Mechanism. The Training and Certification Program involved developing a standardized training program and providing an adequate delivery mechanism to accomplish four major objectives:
 - A. To provide a standardized and consistent training curriculum for local agency weatherization staff;
 - B. To increase and maintain adequate skill levels of weatherization staff and to keep pace with changing technologies;
 - C. To provide career development opportunities for local agency staff; and
 - D. To achieve a recognizable certificate for completing a minimum of 10 TCP courses.

Different training delivery mechanisms were proposed including: private consultants, in-house DCEO staff, state universities and local junior colleges. After careful review, it was determined that a vocationally-oriented community college would provide the best combination of theory and hands-on applicability Indoor Climate Research and Training program (ICRT) of the Illinois Sustainable Technology Center at the University of Illinois at Champaign offers DCEO the best opportunity to effectively accomplish all four objectives.

The reasons for selecting ICRT as the training provider include:

- A. Control of training curriculum and instructors to insure consistent training.
- B. Flexibility to alter the curriculum as weatherization technologies change
- C. Ability to test competency level of enrollees to insure that training objectives are reached and maintained

Ability to develop a college credited curriculum which conforms to the training needs of the IHWAP and can receive endorsements from both private and public sectors.

- 2. TCP Curriculum. Three major factors were considered in developing the content of the curriculum:
 - 1. The content of the courses must be relevant to the day-to-day operation of the IHWAP.
 - 2. The duration of the TCP must be reasonable and strike a balance between being so short as to be meaningless and so long that it would place a burden on staff time.
 - 3. The Instructors must be knowledgeable of the subject matter and be able to communicate with the staff being trained. These three points were constantly mentioned during our discussions with weatherization coordinators. If the program is to be successful, it must be accepted by the local staff.

DCEO has designed a one-week contractor training and certification program. There are separate weeks for

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Architectural and HVAC contractors. This approach is in conjunction with the Illinois Sustainable Technology Center and will be using a portion of the Illinois Community College network. All contractors in the program will be brought up to the same standard, and certified.

An Assessment Of Grantee T&TA Activities To Determine Whether These Funds Are Being Spent Effectively.

As described in the state plan under "Analysis of Subgrantee Weatherization Project Existence and Effectiveness," data is regularly gathered from Subgrantees in order to analyze how well the weatherization program is being operated. This data comes via the Illinois Home Weatherization Assistance Program WeatherWorks System. Observations will also be made in the local agency annual visits and details in the individual monitoring reports to see what areas of training and technical assistance needs to be improved, added, or revised.

V.9 Energy Crisis and Disaster Plan

N/A

IV.1 Subgrantees

BCMW Community Services, Inc.

Carver Community Actions Agency

Community and Economic Development Association of Cook County

CEFS Economic Development Corporation

Community Action Partnership of Central Illinois

Community Contacts, Inc.

Decatur-Macon County Opportunities Corporation

DuPage County Department of Human Resources

East Central Illinois Community Action Agency

Embarras River Basin Agency, Inc.

Fulton County Health Department

Illinois Valley Economic Development Corporation

Kankakee County Community Services, Inc.

Kendall-Grundy Community Services

Community Action Partnership of Lake County

Madison County Community Development

McHenry County Housing Authority

MCS Community Services

Mid-Central Community Action Agency

Northwestern Illinois Community Action Agency

Peoria Citizens Committee for Economic Opportunity, Inc.

Project NOW, Inc.

Rockford Human Services Department

St Clair County Community Action Agency

Sangamon County Department of Community Resources

Shawnee Development Council, Inc.

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Tri-County Opportunities Council

Tazwood Community Services, Inc.

Two Rivers Regional Council of Public Officials

Champaign County Regional Planning Commission

Crosswalk Community Action

Wabash Area Development, Inc.

Western Egyptian Economic Opportunity Council

Western Illinois Regional Council

Will County Center for Community Concerns

IV.2 WAP Production Schedule

Weatherization Plans	
Total Units (excluding reweatherized)	To be determined
Reweatherized Units	None

IV.4 DOE-Funded Leveraging Activities

N/A

IV.5 Policy Advisory Council Members

Policy Advisory Council

Designee of the Illinois Department of Commerce and Economic Opportunity	Larry Dawson, Chairperson	Deputy Director of Office of Energy Assistance	Illinois Department of Commerce and Economic Opportunity
Designees (3) of the Department, representing low-income energy consumers	Katherine Brennan	Illinois Department of Human Services	
Designees (3) of the Department, representing low-income energy consumers	Michael O'Donnell	Executive Director	East Central Illinois Area Agency on Aging
Designees (3) of the Department, representing low-income energy consumers	Bob Vondrasek	Executive Director	South Austin Coalition Community Council
Designee of the Department, representing independent energy providers	Vacant		
Designee of the Illinois Energy Association, representing electric public utilities serving in excess of 1 million customers	Charles Walls	Vice President, Customer Revenue Assurance	Commonwealth Edison
Designee of the Illinois Energy Association, representing combination gas and electric public utilities	Laurie Karman	Regulatory Affairs Liaison	Ameren Illinois Utilities
Designee of the gas public utilities that serve more than 500,000 and fewer than 1,500,000 customers	Adrienne Jones	Director of Government Relations	Peoples Gas and North Shore Gas
Designee of the gas public utilities that serve 1,500,000 or more customers	Dave Lukowicz	Manager of Credit	Nicor Gas
Designee of the Illinois Commerce Commission	Joan Howard	Consumer Policy Analyst	Illinois Commerce Commission
Designee of the Illinois Retail Merchants Association	Rob Karr	Vice-President, Government and Member Relations	Illinois Retail Merchants Association

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Designee of the Illinois Municipal Electric Agency and the Association of Illinois Electric Cooperatives	Phillip (Doc) Mueller	Manager, Government Affairs	Illinois Municipal Electric Agency
Designee of the Illinois Industrial Energy Consumers	Eric Robertson	Lueders, Robertson & Konzen	
Designees (2) of the Illinois Community Action Association	Frank Schwab	Executive Director	Illinois Valley Economic Development Corp.
Designees (2) of the Illinois Community Action Association	Kris White	Executive Director	Will County Center for Community Concerns
Designee of the	Aimee English	Senior Consumer Rights Counselor	Citizens Utility Board

IV.6 State Plan Hearings

In order to identify and describe, pursuant to 10 CFR 440.14, the **State of Illinois's Illinois Home Weatherization Assistance Program** (IHWAP) for the Illinois Program Year 2014 (Federal Program Year 2013) the Illinois Department of Commerce and Economic Opportunity's Office of Energy Assistance (OEA) has prepared this STATE PLAN. The plan will be offered for public hearing and comment with notice of hearing and copies of the planned publically accessible at least 10 days prior to the hearing and opportunity to comment. The Office of Energy Assistance of the Illinois Department of Commerce and Economic Development will hold a public hearing from 10:30 a.m. to 12:00 p.m. on April 26, 2013, located at the Department of Commerce and Economic Opportunity (DCEO), Office of Energy Assistance, 500 East Monroe, 7th floor Conference room, Springfield, Illinois, and also at the James R. Thompson Center, 100 West Randolph, DCEO, 3rd Floor, Illinois Room, Chicago, IL. These two locations will be linked via video conference.